

**IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE**

TITLE:

**ADJUSTABLE BACK SUPPORT BELT BRACE SYSTEM AND REMOVABLE,
ADJUSTABLE SUSPENSION SYSTEM**

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BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates generally to the field of back support belts and, more specifically, to a back support belt brace with adjustable side wings and belt and with removable and adjustable suspenders.

2. Description of Related Prior Art

8 Many occupations require strenuous use of back muscles such as heavy lifting
9 by construction workers, fire fighters, and delivery personnel. Therefore, there are many
10 back injuries, particularly lower back injuries, due to excessive strain on the back. This
11 causes extensive lost work and often chronic lower back pain. There are a wide variety
12 of back support belts to help reduce back injuries.

Numerous belts have been patented for back support, which contain back and side panels (some of which are elastic) with additional tensioning pulls to adjust the belt or merely a normal belt with buckle. Most of these patents provide levels of adjustability through the elastic tension pulls. A shortfall of elastic tension pulls or elastic back and/or side panels is they wear out fairly quickly, and it is often hard to comfortably adjust the tightness of the belt. The present invention provides adjustability through a different mechanism. The present invention has two side wings to allow the brace to be adjusted by moving the side wings and reconnecting with the

1 Velcro fastener to the brace. Also, there is a belt that wraps around and connects to
2 the entire brace and provides another level of adjustability using a belt buckle.

3 Many support belts do not contain any suspenders. A shortcoming of this is that
4 during breaks from lifting, the support belt must be totally removed. Some patented
5 belts do have removable adjustable suspenders; however, they are all similar to normal
6 pant suspenders. Normal pant suspenders do not provide enough support to the brace.

7 The present invention provides more comfortable, durable, and supportive suspenders
8 with padding on both shoulders and upper back.

9 U.S. Pat. Nos. 5,040,524 and 5,176,131, both to Vogel et al., disclose a Back
10 Support. The back support has two panels that connect together in the front of the
11 wearer with hook and loop fasteners. The back panel has semi-rigid stays. Two elastic
12 bands are connected to the back panel and are pulled towards the front of the wearer
13 and hook to the side panels. A belt is passed through loops on the panels, which
14 connects in the front with a buckle. Adjustable suspenders with small shoulder pads
15 are attached to each side panel in the front of the wearer and cross in the back to
16 attach in two locations on the back panel.

17 U.S. Pat. Nos. 5,188,586 and 6,068,606, both to Castel et al., disclose a Back
18 Support Belt. The back support belt has right and left side panels which are connected
19 with a back elastic panel. The front of the support is connected with a fastening
20 material. Rigid vertical stays are connected to the back panel. The snugness of the
21 support is adjusted by the position of tensioning pulls connected to the back elastic

1 panel. Adjustable suspenders are attached to each side panel in the front of the wearer
2 and cross in the back to attach in two locations on the back panel. A wearer's normal
3 belt for holding up his/her pants is connected through loops onto the inside of the
4 support.

5 U.S. Patent No. 5,257,419 to Alexander discloses an Abdominal Support Belt.
6 The abdominal support belt has two side panels and a back support with longitudinal
7 corset stays. The side panels connect in the front of the wearer with a hook and loop
8 material at different positions depending on the size of the wearer's waist. Tensioning
9 straps, which are made of elastic, are connected to the waistband and are pulled to
10 provide enhanced support to the abdomen and back. Adjustable suspenders are
11 attached to each side panel in the front of the wearer and cross in the back to attach in
12 two locations on the back panel.

13 U.S. Patent No. 5,349,706 to Keer discloses Work Belts with Lumbar Supports,
14 Stretchable Side Panels and Interchangeable Pouches. The work belts have elastic side
15 panels on the lumbar support with interchangeable pouches or pockets. The side
16 panels connect like a belt with a buckle on one end and holes on the other end.
17 Adjustable suspenders are attached to each side panel in the front of the wearer and
18 cross in the back to attach in two locations on the back panel.

19 U.S. Patent No. 5,497,923 to Pearson et al. discloses a Suspender Supported
20 Belt. The suspender support belt has two side panels and an elastic back panel. The
21 side panels connect in the front of the wearer. An elastic belt is connected to the back

1 support belt for attachment of secure pouches and hook and loop fasteners for tools.

2 Adjustable suspenders are attached to each side panel in the front of the wearer and

3 cross in the back to attach in two locations on the back panel.

4 U.S. Patent No. 5,499,965 to Sanchez discloses a Shaped Lifting Belt and

5 Method. The shaped lifting belt has a lumbar panel, two shape panels, and two side

6 panels. Vertical stays are on the lumbar panel. Shape straps are connected on both

7 sides of the lumbar panel to shape the shape panels to fit the hips of the wearer. On

8 top of the shape straps are side pulls, which are pulled and connected onto the side

9 panels. The side panels connect with loop and hook surfaces in the front of the wearer.

10 Adjustable suspenders are attached to each side panel in the front of the wearer and

11 cross in the back to attach in two locations on the back panel.

12 U.S. Patent No. 5,503,620 to Danzger discloses a Back Support Belt Apparatus

13 and Method. The back support belt apparatus has a primary support belt that fits

14 around the waist of the wearer. The ends of the primary support belt connect in the

15 front of wearer. There is a secondary tensioning belt of a smaller width connected to

16 the primary support belt. The belt also contains tensioning indicators of danger colored

17 strips to indicate to the wearer and/or observer if the belt is not tightened enough to

18 provide proper support to the abdominal and lumbar areas. Adjustable suspenders are

19 attached to each side panel in the front of the wearer and cross in the back to attach in

20 two locations on the back panel.

1 U.S. Patent No. 5,548,843 to Chase et al. discloses a Back Support with Means
2 to Secure the Belt on the Wearer while in an Open Position. The back support has a
3 primary belt with a back support with left and right side panels. The side panels
4 connect in the front of the wearer with hook and pile fasteners. A secondary belt is
5 connected to the suspenders through loops on the secondary belt. Two cinch straps
6 made of elastic material are connected to the back support and wrap around the
7 primary belt and connect in the front of the wearer with hook and pile fasteners.
8 Adjustable suspenders are attached to each side panel in the front of the wearer and
9 cross in the back to attach in two locations on the back panel.

10 U.S. Patent No. 5,560,046 to Iwamasa et al. discloses a Lumbar Support Belt
11 with Suspenders and Elastic Sections Having Different Elasticities. The lumbar support
12 belt has a back elastic panel and two side panels. The side panels connect in the front
13 of the wearer with hook and pile fasteners. Elastic strips are connected to the back
14 panel and are pulled and connected to the side panels to adjust to the size of the
15 wearer. Adjustable suspenders are attached to each side panel in the front of the
16 wearer and cross in the back to attach in two locations on the back panel.

17 U.S. Patent No. 5,656,020 to Greengarg discloses a Lifting Belt, Panel and
18 Method. The belt has a lifting belt with back elastic panel and two side panels. The
19 back panel extension to the upper back forms into an apron and is detachable and
20 disposable. Detachable elastic bands connect to the back panel and wrap around to
21 the side panels and connect with loop and hook fasteners. Adjustable suspenders are

1 attached to each side panel in the front of the wearer and cross in the back to attach in
2 two locations on the back panel.

3 U.S. Patent No. 5,765,224 to Johnson discloses a Body Support Garment. The
4 body support garment has waist shaped fabric garment panels that wrap around the
5 front, back, and side torso in an hourglass shape. The ends of the garment connect in
6 the front of the wearer with hook and pile attachment. The garment is stretchable
7 except the back panel, which is more rigid. There is an auxiliary elastic-type wrap band
8 connected to the back panel that wraps around to the side where it connects to the side
9 panels with hook and pile fastener in the position to provide enhanced support.
10 Adjustable shoulder straps are connected to the side panels and extend over the
11 shoulders to a vertical back panel connected to the back panel of the support.

12 U.S. Patent No. 5,766,087 to Nelson et al. discloses a Back Brace. The back
13 brace has a waist belt with a non-elastic back portion and elastic side panels. The side
14 panels connect in the front of the wearer with a hook and loop fastener. Two side pulls
15 are connected to the back portion and can be connected in different positions on the
16 belt. Adjustable suspenders are attached to each side panel in the front of the wearer
17 and cross in the back to attach in two locations on the back panel.

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20 **SUMMARY OF THE INVENTION**

21 Generally, the present invention contains a back support belt brace system

1 consisting of a back panel, two side panels, two side wings, and a belt. The side
2 wings are attached anywhere along the back panel and side panels using a hook
3 and loop fastener. This allows any wearer to adjust the size of the system
4 depending on their body size. The belt is connected to the back panel, side panels,
5 and two side wings with a hook and loop fastener. The belt contains an end with a
6 belt buckle and an end with a plurality of holes, which are interlocked to secure the
7 brace when buckled. An adjustable suspension system is attached to the support
8 brace using clips. The suspension system contains adjustable suspenders, shoulder
9 padding, and upper back padding. The back support belt brace system is worn
10 around the waist and the lumbar region of a wearer. The suspension system is worn
11 around the chest and upper back of a wearer, similar to a vest.

12 In view of the foregoing, the principal object of the present invention is to
13 provide an improved adjustable back brace to support and stabilize the lumbar
14 region of the spine.

15 It is another object of the present invention to provide a support that reduces
16 the occurrence of back injuries and chronic back pain.

17 It is another object of the present invention to provide two components of
18 adjustability in the supporting brace system. This is provided with side wings that
19 may be positioned along each part of the support brace depending on the size of the
20 wearer. This is also provided by the belt buckle that secures closed the support
21 brace system.

1 It is another object of the present invention to provide another component of
2 adjustability in the removable suspension system. This is provided with the
3 adjustability of the suspenders.

4 It is another object of the present invention to provide a convenient back
5 support and suspension system with a belt to allow a secured position while lifting
6 and an unsecured position during breaks. This allows a wearer to keep the entire
7 system on during breaks and not have to take off the entire system every time the
8 wearer is not lifting something.

9 It is another object of the present invention to provide a support brace and
10 suspension system that can be worn over any type of work clothes and/or worn
11 under a heavy coat.

12 It is another object of the present invention to provide a fairly lightweight
13 support brace and suspension system for comfort while working.

14 It is another object of the present invention to provide a durable support
15 brace and suspension system that will not wear out quickly.

16 It is another object of the present invention to provide a back support belt
17 brace system that can be conveniently used to attach items thereto, such as tools.

18 It is another object of the present invention to provide an inexpensive back
19 brace and suspension system for any occupation.

20 These and other objects and advantages of the present invention will become
21 apparent to one skilled in the art from the detailed description of the invention and

1 the claims, with it understood that other configurations or substitutions of material
2 may be used and are included within the scope of the claims of this invention.

3 **BRIEF DESCRIPTION OF THE DRAWINGS**

4 Details of this invention are described in connection with the accompanying
5 drawings.

6 FIG. 1 is an exploded view of the back support belt brace system and
7 removable suspension system.

8 FIG. 2 is a front environmental, perspective view with the back support belt
9 brace system and the removable suspension system secured on a person with the
10 belt closed.

11 FIG. 3 is a front elevational view of the back support belt brace system and
12 removable suspension system with the belt closed.

13 FIG. 4 is a rear elevational view of the back support belt brace system and
14 removable suspension system.

15 FIG. 5 is a bottom perspective view of the back support belt brace system.

16 FIG. 5A is a cross sectional view of the back support belt brace system along
17 line 5A—5A in the direction of the arrows of the back support belt brace system in
18 FIG. 5.

19 FIG. 5B is a cross sectional view of the back support belt brace system along
20 line 5B-5B in the direction of the arrows of the back support belt brace system in
21 FIG. 5.

1 FIG. 6 is top view of the back support belt brace system.

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3 **DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT**

4 Referring to Fig. 1, there are two major components of the present invention.

5 The invention includes an adjustable back support belt brace system 10 and a
6 removable, adjustable suspension system 15. The back support belt brace system
7 10 contains six components including a back panel 20, two side panels 25, 30, two
8 side wings 35, 40, and a belt 45. Back panel 20, side panels 25, 30, and side
9 wings 35, 40 are preferably made of a durable, woven material with inner padding.
10 Belt 45 is preferably made of a durable, woven material.

11 Back panel 20 and side panels 25, 30 have inner surfaces 50 and outer
12 surfaces 55. The inner surfaces 50 are worn against the body of a wearer and outer
13 surfaces 55 are worn facing away from the body of a wearer. A fastener 70 extends
14 around the outer surface 55 of back panel 20 and side panels 25, 30. Fastener 70
15 is preferably at least the width of belt 45. Fastener 70 is preferably made of a hook
16 and loop fastener material such as VELCRO. The inner surface 50 of back panel 20
17 and side panels 25, 30 may have a netting type material to protect the material
18 from wear and tear.

19 Side wings 35, 40 each have inner surfaces 60, outer surfaces 65, upper
20 edges 105, and lower edges 110. A fastener 75 extends the length of side wings
21 35, 40 on the inner surfaces 60 of each side wing 35, 40. Fastener 75 is

1 preferably at least the width of belt 45 and is preferably placed evenly between the
2 upper edge 105 and lower edge 110 of side wings 35, 40. A fastener 80 extends
3 the length of side wings 35, 40 on the outer surface 65 of each side wing 35, 40.
4 Fastener 80 is preferably at least the width of belt 45 and is preferably placed
5 evenly between the upper edge 105 and lower edge 110 of side wings 35, 40.
6 Fasteners 75, 80 are preferably made of a hook and loop fastener material such as
7 VELCRO.

8 Belt 45 contains two belt ends 85, 95. Belt end 85 has a plurality of holes
9 90 and belt end 95 has a belt holder 96, a belt buckle 100, and belt buckle rods
10 101. Belt 45 is preferably made of a durable, woven material. Belt ends 85, 95
11 and belt holder 96 are preferably made of a durable, leather material. Belt buckle
12 100 and belt buckle rods 101 are preferably made of metal.

13 Side wings 35, 40 contain rings 115, 120, respectively, on the upper edges
14 105 for connection of the back support belt brace system 10 to the suspension
15 system 15. Back panel 20 contains a ring 125 on the outer surface 55 preferably
16 centrally located between the side panels 25, 30. Rings 115, 120, 125 are
17 preferably made of metal.

18 Suspension system 15 contains two front suspenders 130, 135 and one
19 back suspender 140. Suspenders 130, 135 are connected to shoulder padding
20 145, 150, respectively, and back suspender 140 is connected to back padding
21 155. Adjusters 160, 165, 170 are used to adjust the length of the suspenders

1 130, 135, 140, respectively, on the suspension system 15. Clips 175, 180
2 connect to front suspenders 130, 135, respectively, and clip 185 connects to back
3 suspender 140. Clips 175, 180, 185 are preferably made of metal. Clips 175,
4 180, 185 interlock with rings 115, 120, 125, respectively, to connect the back
5 support belt brace system 10 with the suspension system 15 (see Figs. 3, 4).

6 Referring to Fig. 2, the back support belt brace system 10 and adjustable
7 suspension system 15 are illustrated attached together on a wearer with belt 45 in a
8 closed, secured position. The suspension system 15 is attached to the back support
9 belt brace system 10 with rings 115, 120 on side wings 35, 40, respectively, and
10 clips 175, 180 on the suspenders 130, 135, respectively. The connection is also
11 made with ring 125 on the back panel 20 and clip 185 on the back suspender 140
12 (see Fig. 4). Side wings 35, 40, illustrated in Fig. 1 in a disconnected position, are
13 connected in Fig. 2 to side panels 25, 30 and back panel 20. This connection is
14 made between fasteners 70, 75 and can be in any position along fastener 70 (see
15 Fig. 6). Fastener 70 is preferably a hook fastener, and fastener 75 is preferably a
16 loop fastener to allow a connection between the two. Belt 45, illustrated in Fig. 1 in
17 a disconnected position, is connected in Fig. 2 to side wings 35, 40, back panel 20,
18 and side panels 25, 30. This connection is made between material of belt 45,
19 fastener 80 on side wings 35, 40 and fastener 70 on back panel 20 and side panels
20 25, 30. Fastener 80 is preferably a hook fastener to allow connection with belt 45,
21 which is preferably a woven material that can act as a loop fastener with fasteners

1 70, 80. Belt ends 85, 95 are shown in a secured, closed position created by
2 insertion of belt buckle rods 101 of the belt buckle 100 into any of the plurality of
3 holes 90 and then securing belt end 85 into the belt holder 96.

4 Referring to Figs. 3, 4, front and back elevational views of the back support
5 belt brace system 10 and suspension system 15 are illustrated connected together
6 as would be worn on a wearer. These views provide more detail views of the
7 components of each system. Back panel 20, side panels 25, 30, side wings 35,
8 40, and belt 45 are illustrated in their connected position. The inner surface 50 of
9 back panel 20 and side panels 25, 30 and the outer surfaces 65 of side wings 35,
10 40 are illustrated in Fig. 3. The outer surface 55 of back panel 20 and side panels
11 25, 30 and the outer surfaces 65 of side wings 35, 40 are illustrated in Fig. 4. The
12 upper edge 285 of back panel 20 is worn facing the upper body of a wearer and
13 lower edge 290 of back panel 20 is worn facing the lower body of a wearer. Back
14 panel 20 is generally oval in shape and contiguous with side panels 25, 30, which
15 are generally long oval shapes. Side wings 35, 40 are generally long oval shape and
16 preferably longer than side panels 25, 30.

17 Belt loops 190, 195 are illustrated on side wings 35, 40 extending from the
18 upper edges 105 to the lower edges 110 of side wings 35, 40. Belt 45 is secured
19 to side wings 35, 40 through belt loops 190, 195, 200, 205 (see Figs. 3, 4). Belt
20 loops 190, 195, 200, 205 are preferably made of a durable, woven material. Belt
21 45 can be connected to the outer surface 65 of side wings 35, 40 with fastener 80

1 and material of belt 45 (see Figs. 1, 6). Belt buckle 100 is connected to belt end
2 85 using the plurality of holes 90, which connect together by placing belt buckle
3 rods 101 through any of the plurality of holes 90 depending on the size of the
4 wearer. Belt end 85 is then secured within belt holder 96. Figure 4 illustrates the
5 connection of belt end 85 to belt 45 with connectors 275. Connectors 275 are
6 preferably metal rods.

7 Rings 115, 120 on side wings 35, 40, respectively, are connected onto the
8 upper edges 105 of side wings 35, 40 with clasps 210, 215, respectively. Clasps
9 210, 215 are preferably made of a durable, woven material. Connectors 226 are
10 used to secure the clasps to side wings 35, 40 in a loop fashion (see Fig. 5).
11 Connectors 226 are preferably metal rods. Rings 115, 120 are secured in the loops
12 of clasps 210, 215. Ring 125 is connected to back panel 20 with clasp 220.
13 Clasp 220 is preferably made of a durable, woven material. Connector 225 is used
14 to secure the clasp to back panel 20 in a loop fashion (see Figs. 4, 5). Connector
15 225 is preferably a metal rod. Ring 125 is secured into the loop of clasp 220.

16 Suspension system 15 contains two front suspenders 130, 135 and one
17 back suspender 140. Suspenders 130, 135 are connected to shoulder padding
18 145, 150, respectively, at 260, 265, respectively. Connection 260, 265 is
19 preferably obtained by sewing. Suspender 140 is connected to back padding 155
20 at 270. Connection 270 is preferably obtained by sewing.

21 Adjusters 160, 165, 170 are used to adjust the length of the suspenders

1 130, 135, 140, respectively, on the suspension system 15. Adjusters 160, 165,
2 170 are preferably made of a plastic material. Each adjuster 160, 165, 170
3 preferably has top and bottom openings created with plastic rods 245, 250, 255,
4 respectively, across the center of each adjuster 160, 165, 170, respectively (see
5 Figs. 3, 4). Rods 245, 250, 255 allow the movement of suspenders 130, 135,
6 140 in varying positions depending on the size of a wearer's upper body.

7 Clips 175, 180 connect to front suspenders 130, 135, respectively, with
8 rings 230, 235, respectively. Rings 230, 235 connect into the loop of suspenders
9 130, 135, respectively, formed by insertion of suspenders 130, 135 through
10 adjusters 160, 165. Rings 230, 235 are preferably made of metal. Clip 185
11 connects to back suspender 140 with ring 240. Ring 240 connects into the loop of
12 suspender 140 formed by insertion of suspender 140 through adjuster 170. Ring
13 240 is preferably made of metal. Clips 175, 180, 185 interlock with rings 115,
14 120, 125, respectively, to connect the back support belt brace system 10 with the
15 suspension system 15.

16 Referring to Fig. 5, a bottom perspective view of the back support belt brace
17 system 10 is illustrated to provide additional detail of the adjustability components.
18 The upper edge 285 of back panel 20 is facing downward and lower edge 290 is
19 facing upward in the figure to provide a bottom view. Figure 5 illustrates the inner
20 surfaces 50 of side panel 25, outer surfaces 55 of back panel 20 and side panels
21 25, 30, inner surface 60 of side wing 35, and outer surfaces 65 of side wings 35,

1 40. Figures 5A, 5B provide cross-sections for illustration of the adjustability
2 connections.

3 Outer surface 55 of back panel 20 and side panels 25, 30 have two
4 elements connected to them. First, side wings 35, 40 are connected in any position
5 on side panels 25, 30 and back panel 20. This connection is made with fastener
6 70 on the outer surfaces 55 of side panels 35, 30 and back panel 20 and fastener
7 75 on the inner surfaces 60 of side wings 35, 40. The cross section illustrated in
8 Figure 5A shows this connection. Fastener 70 is illustrated preferably as a hook
9 portion of a hook and loop fastener such as VELCRO. Fastener 75 is illustrated
10 preferably as a loop portion of a hook and loop fastener such as VELCRO. Fasteners
11 70, 75 interconnect to secure side wings 35, 40 to side panels 25, 30 and back
12 panel 20. Second, belt 45 is connected to back panel 20 using fastener 70 and
13 material of belt 45. The cross section illustrated in Figure 5B shows this
14 connection. Fastener 70 is illustrated preferably as a hook portion of a hook and
15 loop fastener such as VELCRO. Belt 45 is preferably made of a material that may
16 act as a loop portion of a hook and loop fastener. A larger wearer may have belt 45
17 also connect to side panels 25, 30 onto fastener 70 because side wings 35, 40
18 would be placed in a position to allow a larger size back support belt brace system
19 10 (see Figs. 5B, 6).

20 Belt 45 has two belt ends 85, 95. Belt end 85 has a plurality of holes 90
21 and connects to belt 45 with connectors 275. Belt end 95 has a belt buckle 100,

1 belt buckle rods 101, and belt holder 96. Belt end 95 connects to belt 45 with
2 connectors 280. Connectors 275, 280 are preferably metal rods. Belt end 85 is
3 inserted through belt loops 190, 195, 200, 205 to secure belt 45 to the back
4 support belt brace system 10 (see Figs. 3, 5). Belt 45 is also secured to side wings
5 35, 40 with fastener 80 on the outer surface 65 of side wings 35, 40. The cross
6 section illustrated in Figure 5A shows this connection. Fastener 80 is illustrated
7 preferably as a hook portion of a hook and loop fastener such as VELCRO. Belt 45
8 is preferably made of a material that may act as a loop portion of a hook and loop
9 fastener. Therefore, material of belt 45 and fastener 80 connect together to secure
10 belt 45 to side wings 35, 40.

11 Rings 120, 125 used for connection of the back support belt brace system
12 10 to the suspension system 15 are illustrated in Figure 5. Ring 120 connects to
13 side wing 40 with clasp 215. Clasp 215 connects to side wings 40 with connector
14 226. Ring 115 connects to side wing 35 with clasp 210 (see Figs. 3, 4). Clasp
15 210 connects to side wing 35 with a similar connector 226 (not illustrated). Ring
16 125 connects to back panel 20 with clasp 220. Clasp 220 connects to back panel
17 20 with connector 225.

18 Referring to Fig. 6, a top view of the back support belt brace system 10 is
19 illustrated to further show the adjustability positions of side wings 35, 40. Side
20 wings 35, 40 may be placed anywhere along side panels 25, 30 and/or back panel
21 20. Side wings 35, 40 connect to side panels 25, 30 and back panel 20 with

1 fastener 75 and fastener 70. The size of the wearer will determine where to place
2 the side wings 35, 40. If a wearer is small, the side wings 35, 40 would be
3 positioned closer to the back panel 20. If a wearer is larger, the side wings 35, 40
4 would be positioned further away from back panel 20 and likely only on side panels
5 25, 30. Belt loops 190, 195, 200, 205 along with fastener 80 secure belt 45 to
6 side wings 35, 40. Belt 45 is also secured to back panel 20 and/or side panels 25,
7 30 depending on the size of the wearer with fastener 70 and material of belt 45.
8 Figure 6 further illustrates the connection of belt ends 85, 95. Belt buckle 100
9 connects into belt end 85 with buckle rods 101. Belt end 85 is then secured into
10 belt holder 96.